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On temporal entanglement and its measures and applications

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Measuring temporal entanglement to identify integrable systems

The temporal entanglement has recently emerged as a new concept in the theory of many-body quantum systems. It is the entanglement computed from the overlap of the half-system right and half-system left influence functionals for a system evolving in time.

I will review the definition and show how such entanglement i) computed classically, ii) measured in experiments iii) used to distinguish between the dynamics of integrable and non-integrable systems.

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